

[4910-13]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Parts 21, 27, 29, and 91

[Docket No. FAA 98-4390; Notice No. 99-10]

RIN 2120-AG53

Flight Plan Requirements for Helicopter Operations Under Instrument Flight Rules

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Supplemental notice of proposed rulemaking (SNPRM).

SUMMARY: On September 2, 1998, the FAA proposed to change instrument flight rules (IFR) for helicopters by revising alternate airport weather planning requirements, weather minima necessary to designate an airport as an alternate on an IFR flight plan, and fuel requirements for helicopter flight into IFR conditions. The comment period closed on October 2, 1998. In response to concerns raised by commenters regarding discrepancies in the original proposal between flight plan information required for helicopters and airplanes, the use of weather minima necessary to designate an airport as an alternate on an IFR flight plan, and the inconsistent use of meteorological terminology, the FAA is revising the original proposal to include commenters' suggestions and correct inadvertent omissions.

DATES: Comments must be received on or before August 2, 1999.

ADDRESSES: Comments on this document should be delivered or mailed, in duplicate, to: U.S. Department of Transportation Dockets, Docket No. FAA-98-4390, 400 Seventh St., SW, Rm. Plaza 401, Washington, DC 20590. Comments may also be sent

electronically to the following internet address: 9-NPRM-CMTS@faa.gov. Comments may be filed and examined in Room Plaza 401 between 10 a.m. and 5 p.m. weekdays, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: William H. Wallace, General Aviation Commercial Division (AFS-804), Flight Standards Service, Federal Aviation Administration, 800 Independence Ave., SW, Washington, DC 20591; telephone (202) 267-3771.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of the proposed action by submitting written data, views, or arguments, as they may desire. Comments relating to the environmental, energy, economic, or federalism impact that might result from adopting the proposals in this notice are also invited. Substantive comments should be accompanied by cost estimates. Comments must identify the regulatory docket or notice number and be submitted in duplicate to the DOT Rules Docket address specified above.

All comments received, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking, will be filed in the docket. The docket is available for public inspection both before and after the comment closing date.

All comments received on or before the closing date will be considered by the Administrator before taking action on this proposed rulemaking. Comments filed late will be considered as far as possible without incurring expense or delay. The proposals contained in this document may be changed in light of the comments received.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this document must include a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. FAA-98-4390." The postcard will be date-stamped and mailed to the commenter.

Availability of the SNPRM

An electronic copy of this document may be downloaded using a modem and suitable communications software from the FAA regulations section of the Fedworld electronic bulletin board service (telephone: 703-321-3339), the Government Printing Office (GPO)'s electronic bulletin board service (telephone: 202-512-1661), or the FAA's Aviation Rulemaking Advisory Committee bulletin board service (telephone: (800) 322-2722 or (202) 267-5948).

Internet users may reach the FAA's web page at <http://www.faa.gov/avr/arm/nprm/nprm.htm> or the GPO's web page at <http://www.access.gpo.gov/nara> for access to recently published rulemaking documents.

Any person may obtain a copy of this document by submitting a request to the Federal Aviation Administration, Office of Rulemaking, ARM-1, 800 Independence Ave., SW, Washington DC 20591, or by calling (202) 267-9680. Communications must identify the notice number or docket number of this SNPRM.

Persons interested in being placed in the mailing list for future rulemaking documents should request from the FAA's Office of Rulemaking a copy of Advisory Circular No. 11-2A, Notice of Proposed Rulemaking Distribution System, that describes the application procedure.

Background

On August 28, 1998, the FAA issued a Notice of Proposed Rulemaking (NPRM) which proposed to amend the general operating rules for helicopters by revising alternate airport weather planning requirements, weather minima necessary to designate an airport as an alternate on an IFR flight plan, and the fuel requirements for helicopter flight into IFR conditions (63 FR 46834; September 2, 1998). The NPRM also proposed to withdraw Special Federal Aviation Regulation (SFAR) No. 29-4, Limited IFR Operations of Rotorcraft. This SFAR provides operators with a means to conduct approved limited IFR operations in rotorcraft that are not otherwise certificated for IFR operations.

The FAA issued the proposal because flight planning requirements (including alternate airport weather minima) for helicopters and other aircraft are virtually identical even though their operating characteristics are substantially different. The only distinction between the flight planning requirements for helicopters and other aircraft is addressed in 14 CFR 91.167. That section specifies different requirements for the amount of fuel helicopters and other aircraft must carry after completing a flight to the first airport of intended landing.

Helicopters, however, fly shorter distances at slower airspeeds than most other aircraft, and they generally remain in the air for shorter periods between landings; therefore, a helicopter is less likely to fly into unanticipated, unknown, or unforecast weather. The relatively short duration of the typical helicopter flight means that the departure weather and the destination weather are likely to be within the same weather system. The original notice therefore proposed to revise the flight planning requirements

for helicopter IFR operations to take into account the unique operating characteristics of these aircraft.

In general, commenters supported the provisions contained in the notice because the proposal not only recognized the unique operating characteristics of helicopters but also provided operators with an additional margin of safety by easing access of helicopters to the IFR system. Commenters also agreed that the proposal would provide qualitative benefits by reducing noise on the ground and by increasing the ability of operators to more efficiently use helicopters. Some of the commenters, however, raised technical issues that were not addressed in the original notice. The FAA has therefore modified the original proposal in response to these comments and is issuing this SNPRM with a 30-day comment period.

Discussion of Comments and Changes to the Original Proposal

General

Thirty-nine comments were received on the NPRM, all of which were generally supportive of the proposal. Commenters praised the NPRM for its potential to enhance safety by facilitating the expansion of helicopter operations under IFR in marginal weather conditions, thereby reducing weather-related accidents. Commenters also stated that adoption of the proposal would enable operators to better utilize their IFR-equipped helicopters, transport clients more efficiently, and reduce noise on the ground. Seven commenters however stated that certain technical issues were not adequately addressed by the FAA in the proposal. These concerns are addressed in detail in the following discussion. In addition, since the FAA's economic analysis did not anticipate any cost of

compliance or need for additional equipment or training, comments on both the quantitative and qualitative benefits of the proposal were favorable also.

Removal of SFAR No. 29-4

A number of commenters addressed the proposed removal of SFAR No. 29-4, Limited IFR Operations of Rotorcraft. One commenter stated that in the past, his company used the provisions of the SFAR to “prove IFR capabilities in a then non-IFR certified helicopter,” and the company “does not want to lose this capability.” Two other commenters stated that the FAA should retain the provisions of the SFAR for a period of time (for either a year or a “reasonable time”) after the other provisions of the NPRM are implemented as a final rule. The commenters believe that this course of action would enable the FAA and industry to determine whether the SFAR is needed or has outlived its usefulness and then reconsider its removal. The FAA does not believe this action is necessary and is again proposing to remove the SFAR.

The SFAR was originally adopted to permit the FAA to collect operational data to study the feasibility of limited rotorcraft operations in IFR conditions. Since the adoption of the SFAR, the FAA has addressed the issue of helicopter IFR operations and issued regulations that govern both the certification and operation of helicopters under IFR. These regulations are found in Appendix B—Airworthiness Criteria for Helicopter Instrument Flight, contained in both 14 CFR parts 27 and 29. Operational regulations permitting helicopters to engage in IFR operations are found in 14 CFR parts 91 and 135.

Paragraph 5 of SFAR 29-4 states that “new applications for limited IFR rotorcraft operations under SFAR No. 29 may be submitted for approval until, but not including the

effective date of Amendment No. 1 of the Rotorcraft Regulatory Review Program. On and after the effective date of Amendment No. 1, all applicants for certification of IFR rotorcraft operations must comply with the applicable provisions of the Federal Aviation Regulations.” The effective date of Amendment No. 1 was March 2, 1983. Concurrent with the effective date of Amendment No. 1, regulations establishing airworthiness criteria for helicopter instrument flight became effective. All new applicants for certification of helicopter IFR operations must now comply with the provisions of Appendix B of parts 27 or 29, as applicable, and part 91. Because the FAA has established certification criteria and operational limitations for helicopters engaged in IFR operations, the need to prove IFR capabilities in a non-IFR certified helicopter is no longer warranted. The changes made to the regulations since the promulgation of SFAR No. 29 therefore no longer make its provisions necessary.

Alternate airport weather minima

Commenters stated that the notice did not provide alternate airport weather minima reductions for helicopters when airports that have non-standard alternate airport weather minima are used as alternate airports. Standard alternate airport weather minima are stated in current 14 CFR 91.169 (c)(1)(i) and (ii), (i.e., for a precision approach procedure a ceiling of 600 feet and a visibility of 2 statute miles; for a nonprecision approach procedure, a ceiling of 800 feet and a visibility of 2 statute miles).

The commenters stated that helicopter operators should not be subject to the same restrictions imposed on operators of other types of aircraft by the use of nonstandard alternate minimums. The commenters noted that these restrictions are generally imposed

to facilitate the conduct of circle-to-land operations. Due to the ability of helicopters to fly any available instrument approach, regardless of wind direction, and to land at the approach threshold regardless of runway length by pivoting into the wind, if necessary, just before touchdown, the commenters asserted that helicopter operators should not be restricted by these non-standard alternate minimums. They further stated that helicopter operators therefore should be allowed to use lower-than-standard alternate weather minima, regardless of whether standard or nonstandard alternate airport weather minima are specified on part 97 approach plates.

The FAA agrees with these comments. Historically, the FAA has permitted helicopter operators to use procedures different from those permitted to be used by other aircraft. 14 CFR part 97 for example, allows helicopters to utilize “copter procedures” or other procedures prescribed in subpart C of that part, and to use the Category A minimum descent altitude (MDA) or decision height (DH). Part 97 also authorizes helicopter operators to reduce the required visibility minimum to one-half the published visibility minimum for Category A aircraft, but in no case may it be reduced to less than one-quarter mile or 1,200 feet runway visibility range (RVR).

Alternate airport weather minima are established using the ceiling and visibility requirements for circling approaches as a minimum. The United States Standard for Terminal Instrument Procedures (TERPS) (FAA Order 8260.3B), Chapter 11. Helicopter Procedures, paragraph 1100.a, “Identification of Inapplicable Criteria”, states in part, “circling approach and high altitude penetration criteria do not apply to helicopter procedures.” The FAA in fact does not evaluate pilots in the performance of circling approaches during evaluation for any rating or check involving the piloting of a helicopter.

Additionally, the Instrument Rating Practical Test Standards (PTS) (FAA-S-8081-4C), published by the FAA to establish the standards for instrument rating certification practical tests for airplane, helicopter, and powered lift category and classes of aircraft indicates that the circling approach task is appropriate only to airplane and airship instrument proficiency checks and ratings.

Therefore, the FAA is proposing to change the language of § 91.169 (c) to permit a helicopter operator to use an airport as an alternate airport provided the ceiling is at least 200 feet above, and the visibility is at least 1 mile above, the approach minima for the approach to be flown. This change would allow helicopters to use lower-than-standard alternate airport minima regardless of the approach to be flown while eliminating the need to alter current approach plates.

Certain commenters proposed that the FAA specify separate alternate airport weather minima for precision and nonprecision approaches used by a helicopter operator. Specifically, a 400 foot ceiling and one mile visibility was proposed for precision approach procedures and a 600 foot ceiling and one mile visibility was proposed for nonprecision approach procedures.

The FAA, however, adopted the language specified in the proposal to ensure that alternate airport approach minima are above actual approach minima in those situations where actual approach minima may be above values commonly associated with precision and nonprecision approaches. The proposed changes would recognize the unique operating characteristics of helicopters and would remove the operational restrictions that occur by requiring helicopters to use alternate approach minima specified in current instrument approach procedures.

Special Instrument Approach Procedures

Current 14 CFR 91.167 (b) states in part that, “paragraph (a)(2) of this section does not apply if – (1) Part 97 of this chapter prescribes a standard instrument approach procedure for the first airport of intended landing.” Additionally, current 14 CFR 91.169 (b) states in part that “Paragraph (a)(2) of this section does not apply if part 97 of this chapter prescribes a standard instrument approach procedure for the first airport of intended landing.” Current regulatory language does not provide for the use of special instrument approach procedures in determining an aircraft operator’s ability to meet alternate airport requirements. The proposal would permit all aircraft operators to use special instrument approach procedures in determining compliance with alternate airport requirements.

Special instrument approach procedures are not issued pursuant to 14 CFR part 97 but may be issued to an operator through inclusion in the operator’s Operations Specifications or through a letter of authorization issued by the Administrator to a specific operator. These approach procedures are not published in part 97, but are developed under the authority of 14 CFR 91.175 (a). The FAA has developed over 120 new helicopter non-precision Global Positioning System (GPS) instrument approaches to heliports since 1995, over 75% of them since October 1997. The FAA has determined that these approaches are not standard instrument approach procedures but “special instrument approach procedures” which require additional aircrew training prior to their use. Therefore, to permit aircraft operators to use special instrument approach procedures to comply with alternate airport requirements, the FAA has revised the language contained

in §§ 91.167 (b)(1) and 91.169 (b)(1), (c)(1), and (c)(2) of the original notice to permit the use of these special approaches when issued to an operator by the Administrator.

Weather Reports and Forecasts

Certain commenters noted the FAA's inaccurate use of the terms "weather forecasts" and "weather reports," and the inconsistency between the way the terms "weather reports and forecasts and weather conditions" and "weather reports and/or prevailing weather forecast" were used in the proposed narrative format and tabular format, respectively. The FAA agrees that the phrases were used inconsistently in the proposal and is therefore proposing use of the phrase "appropriate weather reports or weather forecasts, or a combination of them" in those instances where weather reports and weather forecasts are to be considered by an operator.

The proposed language reflects current usage of the terms "weather forecasts" and "weather reports" by meteorologists and aviation industry personnel. It also includes the term "appropriate" when referring to weather reports and weather forecasts to indicate that an operator should consider current weather reports and current and valid weather forecasts when determining if a flight requires an alternate airport. Use of the term "appropriate" is consistent with references to weather reports and forecasts in other operating rules. Its inclusion should eliminate any ambiguity and ensure conformity in determining those reports and forecasts that should be considered by an operator when designating an alternate airport. Use of the term "appropriate" is also consistent with the provisions of 14 CFR 91.103 which requires each pilot in command, before beginning a flight, to become familiar with all available information concerning that flight.

With regard to the use of weather forecasts, the FAA notes that although a weather forecast may be valid for a period as long as 24 hours, only the most current and valid weather forecast would be considered “appropriate.” In some instances a current weather forecast may be issued, however it may not be valid for the time period required to be considered by an operator when choosing an alternate airport. Such a report would not be considered “appropriate.” Any superceded weather report is not considered current and its use in determining an alternate airport would not be considered appropriate.

The proposal also does not include the descriptive term “prevailing” with the phrase “weather forecasts” because “prevailing” is used to refer to actual weather conditions observed at a station and not to weather forecasts. Its use in the context of the original proposal was therefore improper and has been deleted.

Format of the Proposed Rule

In response to the FAA’s request for specific comments on the comparative merits of displaying portions of §§ 91.167 (b) and 91.169 (b) and (c) in tabular or narrative format, seven commenters addressed this issue. Three commenters preferred the tabular format; two preferred the narrative; and two stated that either format was acceptable. Originally the FAA believed that the tabular format could be a method to make the regulations clearer, pursuant to a recommendation by the White House Commission on Aviation Safety and Security and the June 1, 1998 Presidential Memorandum, “Plain Language in Government Writing.” Upon further consideration of the advantages and disadvantages of narrative and tabular formats, the FAA believes that the narrative format

is preferable. Use of a narrative format is consistent with the format of other regulations in part 91 and does not cause a visual break in the flow of type on a page. This revised proposal is therefore in the all-narrative format.

Technical Corrections

In the original notice the FAA proposed distinct alternate airport weather minima for airplanes and helicopters. Aircraft other than airplanes and helicopters (e.g. airships) however may require access to the IFR system and require the need for an alternate airport. The FAA therefore has revised the original proposal to provide different alternate airport requirements for helicopters and for aircraft other than helicopters, as opposed to airplanes.

Paperwork Reduction Act

In accordance with the Paperwork Reduction of 1995 (44 U.S.C. 3507(d)), the FAA has determined that there are no requirements for information collection associated with this proposed rule.

Compatibility with ICAO Standards

In keeping with U.S. obligations under the Convention on International Civil Aviation, it is FAA policy to comply with International Civil Aviation Organization (ICAO) Standards and Recommended Practices (SARP's) to the maximum extent practicable. The FAA has reviewed corresponding ICAO SARP's and has identified the following differences with these proposed regulations.

The proposal would not prescribe that the weather at the airport of intended landing be at or above the operating minima at the estimated time of arrival. Paragraph 2.6.2.1 of ICAO Annex 6, Part III, International Operations-Helicopters, Section III, International General Aviation, Chapter 2. Flight Operations, requires that the heliport of intended landing meet operating minima at the estimated time of arrival. Current §91.169 also does not specify minimum weather requirements for the airport of intended landing at the estimated time of arrival.

The proposal would require helicopter operators to evaluate weather conditions at the airport of intended landing from the estimated time of arrival until one hour after the estimated time of arrival when determining whether an alternate airport is required. Paragraph 2.6.2.2 of ICAO Annex 6, Part III, Section III, requires an operator to evaluate weather conditions at the heliport of intended landing from two hours before to two hours after the estimated time of arrival or from the actual time of departure to two hours after the estimated time of arrival. Current § 91.169 (b) requires an operator to evaluate weather conditions at the airport of intended landing from 1 hour before the estimated time of arrival until 1 hour after the estimated time of arrival. Proposed § 91.169 (b) would require an operator of a helicopter to evaluate weather conditions at the airport of intended landing from the estimated time of arrival until one hour after the estimated time of arrival.

Paragraph 2.7.1 of ICAO Annex 6, Part III, Section III, states that an alternate shall be required in an operator's flight plan unless the weather conditions specified in paragraph 2.6.2.2 of that section prevail or other specific conditions related to isolated heliports are met and a point of no return (PNR) determination is made, if applicable. The

proposed weather conditions for the selection of an alternate differ from those specified in paragraph 2.6.2.2. and the proposal does not address isolated heliports and PNR determinations.

The FAA recognizes that certain provisions of the notice differ from ICAO SARPs, however the agency has set forth the proposal to recognize the unique operational characteristics of helicopters and to facilitate their entry into the IFR system. If the proposal is adopted the FAA intends to file these differences with ICAO.

Economic Evaluation Summary

Changes to Federal regulations must undergo several economic analyses. First, Executive Order 12866 directs that each Federal agency shall propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs. Second, the Regulatory Flexibility Act of 1980 requires agencies to analyze the economic effect of regulatory changes on small entities. Third, OMB directs agencies to assess the effect of regulatory changes on international trade. In conducting these analyses, the FAA has determined this proposal is not a “significant regulatory action” under section 3 (f) of Executive Order 12866 and, therefore, is not subject to review by the Office of Management and Budget. This proposed rule is not considered significant under the regulatory policies and procedures of the Department of Transportation (44 FR 11034, February 26, 1979). This proposed rule would not have a significant impact on a substantial number of small entities and would not constitute a barrier to international trade. The FAA invites the public to provide comments and supporting data on the assumptions made in this evaluation. All comments received will

be considered in the final regulatory evaluation.

This section summarizes the FAA's economic and trade analyses, findings, and determinations in response to these requirements. The complete economic and trade analyses are contained in the docket (see "ADDRESSES" above).

BENEFITS

There are both quantifiable and non-quantifiable benefits that can be attributed to this SPNRM. Non-quantifiable benefits include the reduction in the level of aircraft noise experienced by individuals on the ground when helicopters fly at higher altitudes and cost savings associated with enhanced corporate flight operations. These benefits are difficult to accurately measure, and are discussed below under "A. Qualitative Benefits." Other benefits would be any reduction in the number of fatal and serious accidents that occur in marginal weather conditions. These benefits can be estimated more readily, and are discussed below under "B. Quantitative Benefits."

A. Qualitative Benefits

During periods of marginal or inclement weather conditions, helicopter operators are often unable to utilize the IFR system because they are unable to meet the IFR flight plan requirements and criteria for specifying an alternate airport. When this occurs, helicopter operators often will fly under either VFR or Special VFR at lower altitudes. By flying at lower altitudes, third party costs (increased level of aircraft noise), are experienced by individuals on the ground.

All noise has the potential to annoy because of interference with speech, sleep,

work, or other activities. However, aircraft noise is a function of aircraft altitude, and noise or sound energy can be reduced by increasing the flight altitude. Therefore, by providing helicopter operators with the opportunity to increase the altitude of a helicopter flight through increased access to the IFR system, the proposed rule will help to reduce the sound energy on the ground generated by that helicopter. For example, if a helicopter flying VFR at 250 ft above ground level (AGL) in marginal weather conditions is able to fly IFR at 4,000 ft AGL in the same marginal weather conditions, the sound energy is reduced by 24 dB, which represents a decrease to less than one-hundredth the level of sound intensity experienced by third parties on the ground.

Another benefit of this rule that is difficult to quantify is the reduction of the opportunity cost of idle executive and other management time. Due to the high level of concern many companies have regarding the safety of their senior executives, the safe operation of their corporate helicopters receives a high priority. As such, during periods of marginal or adverse weather conditions, many corporate helicopter operations are canceled rather than flown VFR under those conditions. Because helicopters provide prompt and effective transportation, a portion of the opportunity cost resulting from cancelled operations can be measured by the lost productivity associated with the extra time involved by executives and other personnel using alternate forms of transportation, such as automobiles. By enabling more helicopter pilots to operate under IFR in marginal weather conditions, these opportunity costs could be avoided.

B. Quantitative Benefits

The quantitative benefits of this rulemaking are derived from a potential reduction

in weather related accidents associated with helicopters operating under VFR or special VFR. The FAA believes that many weather related accidents of the type that in the past occurred under VFR can be prevented in the future by enhanced helicopter operator access into the IFR system. The FAA further believes that this proposed rule will result in increased safety and offer greater operational flexibility for helicopter operators. The FAA bases this belief largely on the U.S. Army's experience of no mishaps over the past 16 years associated with flight planning criteria similar to the FAA's proposed rule.

To estimate potential safety benefits, the FAA analyzed National Transportation Safety Board (NTSB) helicopter accident data, where weather was a cause or factor, for the 10-year period from 1988 to 1997. The most recent accidents that occurred in 1998 are still under review; therefore, because the data record is not complete, no data from 1998 is used in this analysis.

During the 10-year period studied, there were a total of 258 helicopter accidents where weather was a cause or factor of the accident. The total includes 182 accidents involving VFR flight without a flight plan filed, 73 accidents where a VFR flight plan was filed, and three accidents where an IFR flight plan was filed. The 182 accidents involving VFR flights is approximately 60 times greater than the three accidents that occurred under an IFR flight. In addition, the 73 accidents where VFR flight plans were filed is approximately 24 times greater than the three in IFR operation. When the 182 accidents are added to the 73 accidents, the result is a total of 255 accidents, which represents approximately 99 percent of all the accidents that occurred when weather was a cause or factor.

According to informal industry surveys, approximately 10 percent of all helicopter

flights flown are performed under an IFR flight plan. To corroborate the results of the industry surveys, the FAA conducted a simple random sample of helicopter flight plans. The sample consisted of 104 randomly selected helicopter flight plans from the Southern Region. The results showed 33 helicopter flight plans were IFR and 71 were VFR. To approximate the proportion of VFR flights that occurred without a flight plan compared to the sample number of VFR flights, the FAA calculated the ratio of VFR flights without a flight plan to VFR flight plans from the observed accident history. The FAA then multiplied that ratio by the number of VFR flight plans from the sample. The computation produced an estimate of 178 helicopter flights flown VFR without a flight plan during the time period to compare with the 33 flight plans of the sample.

Once an estimate of the number of VFR flights without a flight plan was determined (178), the FAA then added that to the number of sample VFR flight plans filed (71) and the sample IFR flight plans filed (33). That total (282) was divided into the number of IFR flight plans (33). This produced the estimated percentage of all helicopter flights flown IFR (11.7%), which is only 1.7 percent greater than the industry survey results of 10 percent.

The percent of IFR flights from the sample approximately equals the industry survey results. These comparable ratios provide some corroborative evidence that 10 percent of all helicopter operations are conducted under an IFR flight plan. As such, the number of accidents flying IFR would be expected to be approximately 10 percent of the total accidents, or 26 accidents. However, instead of 26 accidents only three accidents occurred under an IFR flight plan. Because the actual number of accidents (3) is approximately 12 percent of the expected number of accidents (26), this information

suggests that IFR flight is safer than VFR flight when marginal weather conditions are present.

When the fatalities sustained during the study period flying with no flight plan (67) are added to the fatalities sustained flying with a VFR flight plan (64) the result is 131 fatal injuries. There were 10 fatal injuries sustained under an IFR flight plan. Similarly, when serious injuries sustained flying with no flight plan (46) are added to the serious injuries sustained flying with a VFR flight plan (41), the result is 87. There was one serious injury sustained in IFR flight.

In aggregate, the number of fatalities and serious injuries that occurred under VFR flight is significantly greater than those that occurred under an IFR flight plan. The FAA is aware that even though weather was a cause or contributing factor in all of these accidents, this rulemaking would not have prevented all of these accidents or injuries. However, the accident and injury data discussed previously suggest IFR flight is safer than VFR flight when marginal weather conditions are present.

Further research revealed that in 19 of the 255 accidents involving VFR flight, the pilot-in-command had instrument ratings for helicopters, or for a combination of helicopters and airplanes. The FAA believes that with the revised weather minimums and the revised standard/nonstandard approach minima provided by the proposal, the pilots with instrument ratings could have taken advantage of positive air traffic control services (such as obstacle avoidance) and flown IFR. However, due to the uncertainty regarding the weather at the destination airports, the FAA recognizes that not all of these 19 accidents may have been avoided. Therefore, the FAA applied the same percentage described above regarding the expected and actual accidents under IFR ($3/26 \cong 12\%$)

where weather was a cause or factor of the accident and determined that 3 of the 19 accidents ($19 \times 12\% \cong 3$) would not have been avoided due to this rulemaking.

There were a total of 16 serious injuries and 18 fatalities that were sustained in the 19 accidents involving VFR flight where the pilot-in-command had instrument ratings for helicopters, or for a combination of helicopters and airplanes. To determine the potential benefits that will result from this SNPRM, the FAA estimated the average costs associated with all the injuries and fatalities. A economic value of \$2.7 million and \$518,000 was applied to each human fatality and serious injury, respectively in accordance with current guidance provided by the Department of Transportation. This computation resulted in an estimate of approximately \$57 million in casualty costs. Also, the value of all of the destroyed aircraft was estimated to be \$8 million. If this rulemaking (the NPRM plus the SNPRM) helps prevent 88 percent of these injuries and fatalities that resulted from 19 accidents, the expected potential safety benefits evenly distributed over the next ten years will be approximately \$57 million (\$40 million, discounted).

COSTS

As was the case with the preceding NPRM, this SNPRM would not impose any additional equipment, training, or other cost to the aviation industry. Therefore, the FAA believes there is no apparent compliance cost associated with this SNPRM. However, the FAA solicits comments regarding the plausibility and extent of the adverse impacts on operators from implementation of the proposed rule.

COMPARISON OF COSTS AND BENEFITS

The proposed rule would not place any additional requirements on the aviation industry. Therefore, there are no compliance costs associated with the proposed rule. Qualitative benefits from the proposed rule would come from reducing the level of aircraft noise experienced by individuals on the ground and from cost savings associated with reducing transportation time for corporate executives and other personnel.

The quantitative benefits come from a potential reduction in accidents by enabling more helicopter pilots to operate under IFR in marginal weather conditions. The regulatory evaluation for the original NPRM found that there were potential safety benefits of \$48 million (\$34 million, present value) in addition to the non-quantified benefits discussed above. In this regulatory evaluation of the original NPRM plus the SNPRM, the potential safety benefits over the next 10 years could be \$57 million or \$40 million, present value. Therefore, the FAA has determined both the original NPRM and this SNPRM are cost beneficial.

Initial Regulatory Flexibility Determination

The Regulatory Flexibility Act of 1980 (RFA) establishes as a principle of regulatory issuance that agencies shall endeavor, consistent with the objective of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of the businesses, organizations, and governmental jurisdictions subject to regulation. To achieve that principle, the RFA requires agencies to solicit and consider flexible regulatory proposals and to explain the rationale for their actions. The RFA covers a wide range of small entities, including small businesses, not-for-profit organizations and small governmental jurisdictions.

Agencies must perform a review to determine whether a proposal or final rule would have a significant economic impact on a substantial number of entities. If the determination is that it would, the agency must prepare a regulatory flexibility analysis as described in the RFA. However, if an agency determines that a proposed or final rule is not expected to have a significant economic impact on a substantial number of small entities, section 605 (b) of the RFA provides that the head of the agency may so certify and a regulatory flexibility analysis is not required. The certification must include a statement providing the factual basis for this determination, and the reasoning should be clear.

This rule would impact entities regulated by part 91. The FAA has determined that there would be no compliance costs associated with this SNPRM, but in the NPRM published September 2, 1998, the agency solicited comments from operators who felt they would be negatively impacted from implementation of the proposed rule. Only positive comments were received supporting the FAA's position that this proposed rulemaking would not place any additional requirements on the aviation industry. Therefore, the FAA believes that there are no compliance costs associated with the proposed rule. Accordingly, the Federal Aviation Administration certifies that this rule would not have a significant economic impact on a substantial number of small entities.

International Trade Impact Statement

The provisions of this proposed rule would have little or no impact on trade for U.S. firms doing business in foreign countries and foreign firms doing business in the United States.

Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (the Act), codified in 2 U.S.C 1501-1571, requires each Federal agency, to the extent permitted by law, to prepare a written assessment of the effects of any Federal mandate in a proposed or final agency rule that may result in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of \$100 million or more (adjusted annually for inflation) in any one year. Section 204(a) of the Act, 2 U.S.C. 1534 (a), requires the Federal agency to develop an effective process to permit timely input by elected officers (or their designees) of State, local, and tribal governments on a proposed "significant intergovernmental mandate." A "significant intergovernmental mandate" under the Act is any provision in a Federal agency regulation that would impose an enforceable duty upon State, local, and tribal governments, in the aggregate, of \$100 million (adjusted annually for inflation) in any one year. Section 203 of the Act (2 U.S.C. 1533), which supplements section 204 (a), provides that before establishing any regulatory requirements that might significantly or uniquely affect small governments, the agency shall have developed a plan that, among other things, provides for notice to potentially affected small governments, if any, and for a meaningful and timely opportunity to provide input in the development of regulatory proposals.

This proposed rule does not contain any Federal intergovernmental or private sector mandate exceeds \$100 million in any one year.

Federalism Implications

The proposed regulations would not have substantial direct effects on the States, on the relationship between national Government and the States, or on the distribution of power and responsibilities among various levels of government. Thus, in accordance with Executive Order 12612, it is determined that such a regulation would not have federalism implications warranting the preparation of a Federalism Assessment.

Environmental Analysis

FAA Order 1050.1D defines FAA actions that may be categorically excluded from preparation of a National Environmental Policy Act (NEPA) environmental assessment or environmental impact statement. In accordance with FAA Order 1050.1D, appendix 4, paragraph 4(j), this rulemaking action qualifies for a categorical exclusion

List of Subjects

14 CFR Part 21

Aircraft, Aviation safety, Exports, Imports, Reporting and recordkeeping requirements.

14 CFR Part 27

Aircraft, Aviation safety.

14 CFR Part 29

Aircraft, Aviation safety.

14 CFR Part 91

Aircraft, Airports, Aviation safety.

The Proposed Amendment

In consideration of the foregoing, the Federal Aviation Administration proposes to amend parts 21, 27, 29, and 91 of Chapter I, title 14, Code of Federal Regulations, as follows:

PART 21—CERTIFICATION PROCEDURES FOR PRODUCTS AND PARTS

1. The authority citation for part 21 continues to read as follows:

Authority: 42 U.S.C. 7572; 49 U.S.C. 106(g), 40105, 40113, 44701-44702, 44707, 44709, 44711, 44713, 44715, 45303.

SFAR No. 29-4 [Removed]

2. Remove Special Federal Aviation Regulation (SFAR) No. 29-4—Limited IFR Operations of Rotorcraft from part 21.

PART 27—AIRWORTHINESS STANDARDS: NORMAL CATEGORY ROTORCRAFT

3. The authority citation for part 27 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701-44702, 44704.

4. Remove the reference to SFAR No. 29-4.

PART 29—AIRWORTHINESS STANDARDS: TRANSPORT CATEGORY ROTORCRAFT

5. The authority citation for part 29 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701-44702, 44704.

6. Remove the reference to SFAR No. 29-4.

PART 91—GENERAL OPERATING AND FLIGHT RULES

7. The authority citation for part 91 continues to read as follows:

Authority: 49 U.S.C. 106(g), 1155, 40103, 40113, 40120, 44101, 44111, 44701, 44709, 44711, 44712, 44715, 44716, 44717, 44722, 46306, 46315, 46316, 46504, 46506-46507, 47122, 47508, 47528-47531, articles 12 and 29 of the Convention on International Civil Aviation (61 stat. 1180).

SFAR No. 29-4 [Removed]

8. Remove Special Federal Aviation Regulation (SFAR) No. 29-4, Limited IFR Operations of Rotorcraft, from part 91.

9. Revise § 91.167 to read as follows:

§ 91.167 Fuel requirements for flight into IFR conditions.

(a) No person may operate a civil aircraft in IFR conditions unless it carries enough fuel (considering appropriate weather reports or weather forecasts, or a combination of them) to--

(1) Complete the flight to the first airport of intended landing;

(2) Except as provided in paragraph (b) of this section, fly from that airport to the alternate airport; and

(3) Fly after that for 45 minutes at normal cruising speed or, for helicopters, fly after that for 30 minutes at normal cruising speed.

(b) Paragraph (a)(2) of this section does not apply if:

(1) Part 97 of this chapter prescribes a standard instrument approach procedure to, or a special instrument approach procedure has been issued by the Administrator to the operator for, the first airport of intended landing; and

(2) Appropriate weather reports or weather forecasts, or a combination of them, indicate the following:

(i) For aircraft other than helicopters. For at least 1 hour before and for 1 hour after the estimated time of arrival, the ceiling will be at least 2,000 feet above the airport elevation and the visibility will be at least 3 statute miles.

(ii) For helicopters. At the estimated time of arrival and for 1 hour after the estimated time of arrival, the ceiling will be at least 1,000 feet above the airport elevation, or at least 400 feet above the lowest applicable approach minima, whichever is higher, and the visibility will be at least 2 statute miles.

10. Revise § 91.169 (a), (b), and (c) to read as follows:

§ 91.169 IFR flight plan: Information required.

(a) Information required. Unless otherwise authorized by ATC, each person filing an IFR flight plan must include in it the following information:

(1) Information required under § 91.153 (a) of this part;

(2) Except as provided in paragraph (b) of this section, an alternate airport.

(b) Paragraph (a)(2) of this section does not apply if :

(1) Part 97 of this chapter prescribes a standard instrument approach procedure to, or a special instrument approach procedure has been issued by the Administrator to the operator for, the first airport of intended landing; and

(2) Appropriate weather reports or weather forecasts, or a combination of them, indicate the following:

(i) For aircraft other than helicopters. For at least 1 hour before and for 1 hour after the estimated time of arrival, the ceiling will be at least 2,000 feet above the airport elevation and the visibility will be at least 3 statute miles.

(ii) For helicopters. At the estimated time of arrival and for 1 hour after the

estimated time of arrival, the ceiling will be at least 1,000 feet above the airport elevation, or at least 400 feet above the lowest applicable approach minima, whichever is higher, and the visibility will be at least 2 statute miles.

(c) IFR alternate airport weather minima. Unless otherwise authorized by the Administrator, no person may include an alternate airport in an IFR flight plan unless appropriate weather reports or weather forecasts, or a combination of them, indicate that, at the estimated time of arrival at the alternate airport, the ceiling and visibility at that airport will be at or above the following weather minima:

(1) If an instrument approach procedure has been published in part 97 of this chapter, or a special instrument approach procedure has been issued by the Administrator to the operator, for that airport, the following minima:

(i) For aircraft other than helicopters: The alternate airport minima specified in that procedure, or if none are specified the following standard approach minima:

(A) For a precision approach procedure. Ceiling 600 feet and visibility 2 statute miles.

(B) For a nonprecision approach procedure. Ceiling 800 feet and visibility 2 statute miles.

(ii) For helicopters: Ceiling 200 feet above and visibility 1 statute mile above the approach minima for the approach to be flown, and

(2) If no instrument approach procedure has been published in part 97 of this chapter or no special instrument approach procedure has been issued by the Administrator to the operator, for the alternate airport, the ceiling and visibility minima are those allowing descent from the MEA, approach, and landing under basic VFR.

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/s/

Ava L. Mims,
Deputy Director, Flight Standards Service.